

ENOIU, C., ing.

Variation of drilling speed and drill-hole production
depending on the drilling regime parameters. Petrol si
gaze 13 no.12:537-545 D '62.

SELESHNIKOV, S.I. (Leningrad); ENOKHOVICH, A.S.

Brief calendar of physics, technology, and astronomy for 1961.
Fiz. v shkole 21 no.1:102-108 Ja-F '61. (MIRA 14:9)
(Physics) (Astronomy)

EXCERPTA MEDICA Sec 8 Vol 12/1 Neurology Jan 59

264. CLINICAL EXPERIENCE IN THE TREATMENT OF TETANUS WITH A CURARE-LIKE SUBSTANCE - Klinikai tapasztalatok curara-szerű anyag alkalmazásával a tetanus-betegség gyógykezelésében - Enrico C. and Harkányi I. Torino-i Tudományegyet. Általános Sebészeti Klin. - ORV. HETIL. 1958, 90/20 (680-682)

Nineteen cases in adults were treated with 3-(*n*-methoxyphenoxy)-1:2-propanediol (guaiacol glyceryl ether), an analogue of mephenesin. This drug prevents spasm without giving rise to respiratory paralysis. Treatment was continued for 7 to 11 days. Eighteen patients recovered completely and one died. Supportive therapy was given by serum and penicillin. The specific treatment was given in the form of an i.v. infusion 8 to 12 g. daily. There were no complications. It is considered that this method of treatment is far superior to anything attempted so far.

Lorber - Sheffield (L, 6, 7, 8)

ENNULO, Yu. A., doktor med.nauk

Modification of the cavernotomy operation. Probl.tub. no.4:52-
54 '61. (MIFA 14:12)

1. Iz Instituta eksperimental'noy i klinicheskoy meditsiny
(dir. - kand.med.nauk P.A. Bogovskiy) Akademii nauk Estonskoy
SSR.

(LUNGS--SURGERY)

L 38312-66

ACC NR: AP6027970

SOURCE CODE: RU/0007/66/017/002/0064/0071

AUTHOR: Enciu, C. (Engineer)

17
8

ORG: none

TITLE: Extension of jet drilling in the Socialist Republic of Rumania

SOURCE: Petrol si gaze, v. 17, no. 2, 1966, 64-71

TOPIC TAGS: petroleum industry, petroleum engineering

ABSTRACT: After briefly analyzing some features of jet drilling and the influence of hydraulic parameters on the drilling indexes, the author presents a simple method of hydraulic calculations and reports some experimental results obtained with the use of jet drilling in Rumania. [Based on author's Eng. abst.] [JPRS: 36,559]

SUB CODE: 13, 05 / SUBM DATE: none / ORIG REF: 004 / OTH REF: 006

Card 1/1 *LC*

UDC: 622.243.142:622.24.051

ENROCZI, E.

MARTIN, J.; BATA, G.; ENROCZI, E.; MOLL, A.

Utilization of cortisone and hydrocortisone on the basis of experiments in vivo and in vitro. Acta physiol. hung. 11 no.3-4:385-391 1957.

1. Institute of Physiolog, Medical University, Pecs.

(CORTISONE, metab.

comparison with hydrocortisone metab. in various tissues in vivo & in vitro.)

(HYDROCORTISONE, metab.

comparison with cortisone metab. in various tissues in vivo & in vitro.)

ENDRODI, Janos

Long-range planning in sugar beet production. Cukor 13 no.11:297-301
N '60.

1. Kcsponti Elelmiszeripari Kutatointezet.

ENROL'D, V-N.

BUZIK, Valentin Filippovich; BYAKOV, Miron Romanovich; URETSKIY, Moisey Lazarevich; ENROL'D, Valentina Nikolayevna; DORMIDONTOV, F.K., otvetstvennyy redaktor; KONTAROVICH, A.I., tekhnicheskiy redaktor; KAMOLOVA, V.M., tekhnicheskiy redaktor

[Work rhythm and uniformity in shipbuilding] Ritmichnost' i ravnomernost' sudostroitel'nogo proizvodstva. Leningrad, Gos. soizuznoe izd-vo sudostroit. promyshl., 1956. 111 p. (MLRA 9:9)
(Shipbuilding)

ENS, G., elektromekhanik

The Far East and the North need more powerful icebreakers. Mor.
flot 25 no. 2144 F '65. (MIRA 1814)

ENS, I., inzh. po normirovaniyu.

New edition with old shortcomings. Avt. transp. 36 no.12:56 D '58.
(Automobiles--Maintenance and repair) (MIRA 11:12)

ENTELIS, F.S.

7-10

Electric heating in the production of window glass.
 F. S. ENTILIS, *Sibol'saya i Keram. Prom.*, 1947, No. 4,
 pp. 8-13. Details are given on the construction and
 operation of the only window-glass plant in the Soviet
 Union in which electric heating is used for glassmelting.
 The plant, situated in Kirevan, started operations in Feb.
 1946. The glassmelting furnace is of the direct resistance
 type. Current is conducted to the glass melt through
 hollow cast-steel electrodes, each weighing about 350 kg.
 A diffuser near each electrode brings cold air to the elec-
 trode and draws off the hot air (70°) which is used for heat-
 ing the building and for other needs. Energy consumption
 (calculated) is 1.61 kw-hr./kg. of melted glass. B.Z.K.

ASB SLA METALLURGICAL LITERATURE CLASSIFICATION

SECTION ONE

SECTION TWO

SECTION THREE

SECTION FOUR

SECTION FIVE

SECTION SIX

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SECTION NINETY FIVE

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SECTION NINETY SEVEN

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SECTION HUNDRED

ENTELIS, F. S. 0

1959. **ELECTRICALLY HEATED GLASS TANK.** Entelis, F. S. (Glass Industry, Nov. 1947, 23, 572-573, 602; Translated from Glass and Ceramic Industry, U.S.S.R., 1947, No. 4, 8) Gives details of experience with first tank of above type in the U.S.S.R. Includes diagrams giving details of construction, including refractories used for different parts.

B.L.R.

USSR/Miscellaneous

Card 1/1 : Pub. 104 - 2/14

Authors : Entelis, F. S.

Title : Methods of developing the architectural glass industry

Periodical : Stek. 1 ker. 10, page 4, Oct 1954

Abstract : The work of several scientific institutions in Leningrad and Moscow, on the establishment of ways and means for the development of a large-scale architectural glass industry in the USSR, is briefly described. Illustration.

Institution : ...

Submitted : ...

ENTELIS, F. S.

USSR/ Miscellaneous - Ornamental glass

Card 1/1 Pub. 104 - 10/14

Authors : Entelis, F. S.

Title : A new monumental artistic production of glass

Periodical : Svek. i ker. 11/11, 23-24, Nov 1954

Abstract : A description is given of an artistic vase 3.5 meters high made by the Leningrad Art Glass Factory. The vase is remarkable on account of the high quality of the art work and the large number of detailed parts worked into a single piece. Illustration.

Institution:

Submitted:

YURCHAK, I.Ya., kand. tekhn. nauk; TRYAPKIN, Ye.G.; GORODOV, N.N.; KOVEL'MAN,
G.A.; ENTELIS, F.S.

Ways of mechanizing the production of porcelain and faience tableware.
Trudy GIKI no.3:3-30 '56. (MIRA 11:5)

(Pottery)

(Ceramic industries--Equipment and supplies)

Entelis, F.S.

72-11-1/9

AUTHORS: Kachalov, N.N., Entelis, F.S.

TITLE: Soviet Artistic Glass Production (Sovetskoye khudozhestvennoye steklodeliye)

PERIODICAL: Steklo i Keramika, 1957, Nr 11, pp. 1 - 4 (USSR)

ABSTRACT: In 1939 the Soviet Union exhibited for the first time artistic glass products at New-York world exhibition; this was a crystal-fountain 4,25 m high. At the same time work started in the field of artistic glass production at the Leningrad Technological Institute where under the direction of Professor V.V. Vargin a great variety of colored glasses, smalts and glazings as well as the molding method for the casting of great sculptures were developed. Also the characteristics of sand-blast technique were investigated in detail. In 1940, originated by some artists, began the works for the development of artistic glass production. In the Leningrad mirror factory an experimental department and a laboratory were found which had the task to carry out scientific research work in this field and to create new samples of articles for daily use and of decoration articles. This work was interrupted by the war and was picked up

Card 1/2

72-114/9

Soviet Artistic Glass Production

again only in 1948 with special attention being paid to the development of the building-glass production. In 1949 the above mentioned mirror-factory was transformed into a special factory for the production of artistic glass, which, in the course of some years, became the leading factory of its branch. There is 1 figure.

AVAILABLE: Library of Congress

Card 2/2

AUTHORS: Entelis, F. S., Bochkova, N. V. SOV/72-58-8-11/17

TITLE: New Technological Scheme for the Continuous Production of Porcelain Teapots (Novaya tekhnologicheskaya skhema potochnogo proizvodstva farforovykh chaynikov)

PERIODICAL: Steklo i keramika, 1958, Nr 8, pp. 33-36 (USSR)

ABSTRACT: In 1955 N. M. Al'tshuller, collaborator of the GIKI, suggested a new technological scheme (Fig 1) which was to make it possible to produce 2000 teapots per shift on the assembly line with not more than 14 workers. It dealt with the construction of a special complicated conveyer belt for pre-drying the raw products. This fact as well as the presence of a great number of hand work to be done and a comparatively small output caused the authors to look for other ways. Experiments showed that for pre-drying of the unfinished pieces in the molds the conveyor-belt convection dryers can be used which are frequently used in porcelain factories. Also the drilling of the sieve of the teapot could be carried out immediately after the unfinished piece has been knocked out from the mold. After adding the snout and the handle the final drying

Card 1/3

New Technological Scheme for the Continuous Production of Porcelain Teapots SOV/72-58-8-11/17

could be done in the same dryer at a temperature of from 70 to 80° in the course of 3 hours. Based on these experiments a relatively simple scheme for the continuous production of teapots and sugar basins could be developed. A rational division of the work into certain sections made it also possible to increase the output per worker. In 1956 the State Scientific Research Institute for Ceramics (Gosudarstvennyy nauchno-issledovatel'skiy keramicheskiy institut) worked out a project for a continuous production of 2000 teapots per shift with the above mentioned experimental results being fully used in it. 10 workers are employed for the conveyor belt. The operation cycle from molding to finishing takes 5-5,5 hours instead of the hitherto used 72 hours. The first continuous production of this kind was started at the Dmitrovskiy Porcelain Factory (Fig 2) as may be seen from the work by L. G. Reznikov (Ref 1). Thanks to the delivery of special dryers for teapots and sugar basins of the "Türingen" type (Tyuringiya) the output of teapots and sugar basins could be increased to 6000 pieces per shift. At the Pervomaykiy Factory 2 lines for 800 big and 250 small teapots were installed.

Card 2/3

New Technological Scheme for the Continuous Production
of Porcelain Teapots

SOV/72-58-8-11/17

(Fig 3). The Institute designed a continuous production line for 5000 teapots per shift for the Dulevskiy Factory (Fig 4), and for the "Proletariy" porcelain factory one for 2000 pieces per shift (Fig 5). The technical and economic comparative data of the various methods of the production of teapots are mentioned in the table. There are 5 figures, 1 table, and 1 reference, which is Soviet.

1. Galleys--Equipment
2. Industrial production--Development

Card 3/3

ENTELIS, F. S., Cand. Tech. Sci. (diss) "Structure and Kinematics of Flow of Plast Ceramic Masses as Prerequisite for Mechanization of Process of Forming," Leningrad, 1961, 19 pp. (Leningrad Technol. Inst.) 180 copies (KL Supp 12-61, 277).

S/072/61/000/002/001/001
B021/B058

AUTHOR: Entelis, F. S.

TITLE: Determination of Anisotropy and Formation of Artificial Structures in Plastic Ceramic Materials

PERIODICAL: Steklo i keramika, 1961, No. 2, pp. 24 - 28

TEXT: The elaboration of a direct and comparatively quick, accurate method of determining anisotropy in every elementary volume of plastic material is described as being an important problem. The method by the GIKI ((Gosudarstvennyy issledovatel'skiy keramicheskiy institut (State Ceramics Research Institute)) is based on the authors hypothesis on the character of the deformation of an elementary unit, consisting of n plane-parallel pinacoids in contact at their main faces. When a cylinder made from anisotropic plastic material is compressed, it takes the shape of a drum with elliptic cross section. The minor axis of the elliptic cross section can serve as an index for the prevailing orientation of the lamellas of the clay mineral; the inclination of the axis of the drum-shaped body can be considered the prevailing direction of the pinacoid faces

Card 1/2

✓

Determination of Anisotropy and Formation of Artificial Structures in Plastic Ceramic Materials S/072/61/000/002/001/001 B021/B058

in the space. A round rod from porcelain with a diameter of 120 mm was taken from the vacuum press at the Leningradskiy farforovyy zavod imeni Lomonosova (Leningrad Porcelain Plant imeni Lomonosov) and subjected to intensive drying until crack formation. The anisotropy caused by the extruder of the press was determined from the direction of the cracks. The production of a completely isotropic plastic ceramic material is described as being impossible. Academician P. A. Rebinder founded a new field of science, physicochemical mechanics, which deals with problems of artificial structure formation. The effect of a continuous extrusion of the material on the structure of the rod is mentioned in Fig. 4. It is finally stated that a direct method for the quantitative determination of the anisotropy of plastics has been proposed. The suitability of producing artificial anisotropic structures in ceramic materials was noted. This is not only a means of preventing the deformation of porcelain products, but also permits obtaining porcelain, faience, and other ceramic products with new physical and mechanical properties. There are 4 figures and 3 references: 1 Soviet and 2 German.

Card 2/2

Z/013/62/000/009/001/001
D008/D102

AUTHOR: Entelis, F.S., Candidate of Technical Sciences (Leningrad)

TITLE: Structure and kinematics of plastic ceramic masses

PERIODICAL: Sklar a keramik, ^{Vol 12} no. 9, 1962, 263-267

TEXT: This is the first part of an article dealing with a direct method of determining the kinetics of the ceramic mass flow in forming of porcelain plates. The method consists of cutting out cylindrical specimens from the roll of ceramic mass according to a definite system of coordinates. These specimens are then compressed in transparent cases to 50% of their height thus permitting determination of the degree of their ellipticity and the direction of the major and minor axes within the original reference system of coordinates. Compressed specimens, taken from a round roll of ceramic mass with an ideal axial symmetry of its structure, retain their circular cross section, while the ellipticity of specimens taken farther away from the center increases with increasing distance from the center. The advantages of the method are as follows: 1. It makes possible to con-

Structure and kinematics of ...

Z/013/62/000/009/001/001
D008/D102

trol the degree of isotropy of the ceramic mass during the processing and forming stages. 2. It is a direct method using the ceramic mass in its plastic state. 3. It is fast and can be performed by any plant laboratory. It can be used for checking the quality of the plastic mass and provides clues for redesigning the mouths of presses. There are 8 figures and 2 tables.

Card 2/2

ENTELES, F.S., kandidat technickych ved (Leningrad)

Structure and kinetics of plastic ceramic masses (Conclusion).
Sklar a keramik 12 no.10:296-298 0 '62.

ENTELIS, F.S., kand. tekhn. nauk; SMIRNOVA, A.I., inzh.

Investigating plastic molding processes. Stek. i ker. 20
no.10:14-20 0 '63. (MIRA 16:10)

1. Gosudarstvennyy issledovatel'skiy keramicheskiy institut.
(Ceramics)

ENTELIS, F.S., kand. tekhn. nauk

Glass making in an electric furnace. Stek. 1 ker. 21 no.1:4"
Ja '64. (MIRA 17:8)

KISKIN, Petr Khristoforovich; ENTELIS, G.S., red.; POLONSKIY, S.A.,
tekhn. red.

[Guide for determining grape varieties in nurseries] Kluch
dlia opredeleniia sortov vinograda v pitomnike. Kishinev,
Izd-vo "Shtiintsa" Akad. nauk Moldavskoi SSR, 1962. 109 p.
(MIRA 16:5)

(Moldavia--Grapes--Varieties)

ENTELIS, S.G.; TIGER, R.P.; NEVEL'SKIY, E.Ya.; EPEL'BAUM, I.V.

Kinetics and hydrolysis mechanism of carboxyl dichlorides.

Report No.1: Reaction rate as dependent on the polarity of the medium. Izv.AN SSSR.Otd.khim.nauk no.2:245-252 F '63.

(MIRA 16:4)

1. Institut khimicheskoy fiziki AN SSSR.

(Chemical reaction, Rate of) (Anhydrides)

(Hydrolysis) (Dipole moments)

ENTELIS, S.G.; TIGER, R.P.; NEVEL'SKIY, E.Ya.; EPEL'BAUM, I.V.

Kinetics and mechanism of the hydrolysis of carboxylic acid dichlorides. Report No.2: Temperature dependence of the reaction rate, and the relation of activation energy and entropy to the polarity of the medium. Izv.AN SSSR.Otd.khim. nauk no.3:429-436 Mr '63. (MIRA 16:4)

(Phthaloyl chloride) (Therephthaloyl chloride)
(Hydrolysis)

ENTELIS, S.G.; KAZANSKIY, K.S.; KOGAN, G.A.

Kinetics of styrene dimerization in aqueous sulfuric acid.

Part 1: Ionization of styrene in the $H_2SO_4 - H_2O$ system.

Kin. i kat. 4 no. 2: 277-281 Mr-Apr '63.

(MIRA 16:5)

1. Institut Khimicheskoy fiziki AN SSSR.

(Styrene)

(Ionization)

(Sulfuric acid)

67697

127530

SOV/126-8-4-21/22

AUTHORS: Arkharov, V.I., Blankova, Ye.B., Sukhova, N.A.,
and Entelis, R.A.

TITLE: Investigation of Reaction Diffusion[✓] in Binary Systems
of the Type "Metal-Gas". III

PERIODICAL: Fizika metallov i metallovedeniye, 1959, Vol 8, Nr 4,
pp 636-638 (USSR)

ABSTRACT: Arkharov and Blankova have previously (Ref 1) postulated
a correlation between an increase in the relative role
of homopolar bonding in diffusion-reaction products and
the increase in the relative role of the metalloid in
the diffusion process. To check this they have now
studied the mechanism of diffusion in the systems:
Fe-P, Co-P, ~~Zr-S~~ ^{Zr-Se}, ~~Zr-Te~~ ^{Zr-S}, Nb-S, Nb-Se and
Nb-Te. These are particularly suited, as the authors
explain, to studies of the postulated correlation. The
results are tabulated, showing for each system the
temperature range, the number of macroscopic layers,
number of metallographically distinct layers, phase
composition of the scale, whether there is texture in
the scale layers and the macroscopic characteristics of
reaction diffusion. Much of the information on scale

Card
1/2

6769⁷

SOV/126-8-4-21/22

Investigation of Reaction Diffusion in Binary Systems of the
Type "Metal-Gas". III

phase-composition is referred to published work by other authors. From their comparison of data obtained by various methods the authors conclude that at 400-600 °C uni-directional diffusion of phosphorus occurs in Fe-P and Co-P; in all the Zr and Nb systems uni-directional diffusion of metalloids is found at 400-1000 °C. These results and their comparison with those for other systems confirm that the increase in the relative role of homopolar bonding is associated with an increase in the relative role of the metalloids in diffusion reactions. There are 1 table and 10 references, of which 4 are Soviet, 5 German and 1 Scandinavian.

Card
2/2

ASSOCIATION: Ural'skiy gosudarstvennyy universitet imeni
A.M. Gor'kogo
(Urals State University imeni A.M. Gor'kiy)

SUBMITTED: June 19, 1959

ENTELIS, S. G.

USSR/Chemistry - Ethane Chemistry Oxidation

Aug 48

"Variations in the Formal Kinetics of the High- and Low-Temperature Oxidation of Ethane = I. Kinetics of the Reaction of Slow Oxidation of Ethane at Temperatures up to 400 Degrees Centigrade," N. M. Chirkov, S. G. Entelis, Inst of Chem Phys, Acad Sci USSR, Moscow, 10 pp

"Zhur Fiz Khim" Vol XXII, No 8

Graphic analysis shows a deviation from Arrhenius' Law and a reverse temperature course in the ethane oxidation reaction at 340-370° C, accompanied by a shift in the maximum of curves $w = f(\Delta p)$ and changes in their forms. There is a gradual change in effective energy of activation in the reaction from $E_{eff} = 30,000-33,600$ cal/mol at 270-340° C to $E_{eff} = 55,600$ cal/mol at 400-500° C. At 274-333° C value for induction period increases with an increase in temperature and there is a simultaneous increase in the maximum speed of reaction. Oxidation of ethane at low temperatures theoretically should exhibit phenomena similar to a negative chain interaction. Submitted 27 Dec 47.

PA 55/49T15

ENTELIS, S. G.

"Kinetics of Adding Hydrogen Halides to the Lower Olefins in the Presence of Concentrated Acids." Cand Chem Sci, Inst of Chemical Physics, Acad Sci USSR, Moscow, 1955. (KL, No 11, Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (16).

"APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041212

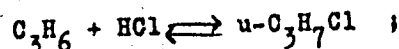
APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041212(

ENTELIS, S. G.

20-6-37/59

AUTHOR: ENTELIS, S.G., and CHIRKOV, N.M.
 TITLE: The Thermodynamics of Propylene Hydrochlorination.
 (Termodinamika reaktsii gidrokhlorigovaniya propilena. Russian).
 PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol 113, Nr 6, pp 1318 - 1320
 (U.S.S.R.)
 ABSTRACT: The hydrochlorination reaction of propylene is reversible



direct measurements of the constant of equilibrium and of process heat are, however, lacking. According to data given in tables for the formation heat of these substances it follows that

$$2,3 RK_p = 13816/T - 36,02.$$

According to Tomsen the experimental heat is $\Delta H_R = -11960$ Kal/Mol. Before the measurements $n-C_3H_7Cl$ was found to be the only reaction product in these conditions. In order to prove that the equilibrium studied here is a true one and that it is not connected with any kinetic limit phenomena, it was intended to be attained by means of the synthesis as well as by the decomposition of the product. The constants of equilibrium which were obtained in the experiments (curves 1. and 2., ill. 1) were approximated according to their values. Ill. 2 shows the data of table 2 in $\lg K_p - 1/T$ coordinates. The reaction heat ob-

Card 1/2

20-6-37/59

The Thermodynamics of Propylene Hydrochlorination,
tained coincides well with the value calculated by means of the tables.
From table 3 we see mainly that reversibleness begins only at 120°. At
100° and all the more at 70° reversibleness is low. (2 illustrations,
3 tables).

ASSOCIATION: Institute for Chemical Physics of the Academy of Science of the USSR.
(Institut Khimicheskoy fiziki Akademii nauk SSSR).
PRESENTED BY: V.N. KONDRAT'YEV, Member of the Academy
SUBMITTED: 6 November 1956
AVAILABLE: Library of Congress

Card 2/2

*Instit. Khimicheskoy fiziki akad. nauk SSSR. Russ. akad.
V. N. Kondrat'yev.*

AUTHORS:

Entelis, S. G., Petrakovich, V. Ye., Korovina, G.V., 20-114-4-46/63
Chirkov, N. M.

TITLE:

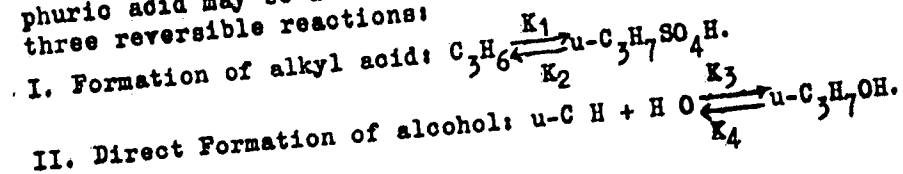
The Kinetics of the Formation of Alcohol and Alkyl Acid in the
Reaction of Propylene With a Water Solution of Sulphuric Acid.

PERIODICAL:

(Kinetika obrazovaniya spirta i alkil kisloty pri reaktsii propilena s vodnoy sernoy kislotoy)
Doklady Akademii Nauk SSSR, 1957, Vol. 114, Nr 4, pp. 848-851
(USSR)

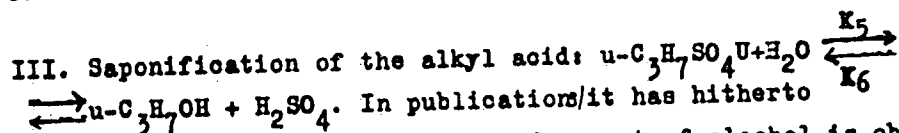
ABSTRACT:

A number of papers was devoted to the investigation of the
absorption kinetics of olefines by sulphuric acid. The majority
of the works, that of Rustamov excepted, have a common funda-
mental deficiency: they were performed under conditions in which
the absorption velocity is limited by diffusion processes. The
authors studied the absorption kinetics of propylene by 67%-
sulphuric acid at 42-90°C and an initial pressure of ~800 torr.
The complicated acid-catalytic processes of propylene in sul-
phuric acid may be described roughly for the dissolution as
three reversible reactions:



Card 1/3

The Kinetics of the Formation of Alcohol and Alkyl Acid in the Reaction of Propylene With a Water Solution of Sulphuric Acid. 20-114-4-46/63



not been recorded whether the chief amount of alcohol is obtained by II. or III. However, the fact of a parallel accumulation of alcohol itself excludes reaction III. The experimental curves obtained are compared with the theoretical ones. Two cases were assumed: 1. no saponification of the alkyl acid occurs, 2. alcohol forms parallel to $u-C_3H_7SO_4H$ as well as by saponification of the latter. From the described short analysis it may be concluded that the chief, if not the total, amount of alcohol does not result from saponification of $u-C_3H_7SO_4H$, but develops parallel with it during the C_3H_6 reaction in water. There are 4 figures, 2 tables, and 8 references, 5 of which are Slavic.

ASSOCIATION: Institute for Chemical Physics of the AS USSR (Institut khimicheskoy fiziki Akademii nauk SSSR)

PRESENTED: January 19, 1957 by V. N. Kondrat'yev, Member, Academy of
Card 2/3

The Kinetics of the Formation of Alcohol and Alkyl Acid in the 20-114-4-46/63
Reaction of Propylene With a Water Solution of Sulphuric Acid

Sciences, USSR

SUBMITTED: January 16, 1957

Card 3/3

SOV/76-32-9-36/46

AUTHORS: Entelis, S. G., Tsikulin, M. A., Volkov, L. V., Chirkov, N. M.

TITLE: Methods and Apparatus of Physical-Chemical Research (Metody i tekhnika fiziko-khimicheskogo issledovaniya) The Determination of the Specific Surface Areas of Porous Bodies and Powders by the Method of Gaseous Flow (Izmereniye udel'noy poverkhnosti poristikh tel i poroshkov metodom istecheniya razrezhennogo gaza)

PERIODICAL: Zhurnal fizicheskoy khimii, 1958, Vol 32, Nr 9, pp 2187-2191 (USSR)

ABSTRACT: The specific surface area of porous bodies can be measured using a gaseous flow in the Knudsen pressure range, which is described in the papers of B. V. Deryagin and his co-workers (Refs 1 and 2). The present paper describes an improved and simpler apparatus (Figs 4 and 5). The formula given by Deryagin was used in conversions in carrying out determinations. Using this method the specific surface areas of the following substances were determined (Tables 1 and 2): porous glass (Shott Nr 4, Iena); porous glass (Shott Nr 3, Druzhnaya Gorka); porous porcelain (avecha Chamberlena); birch charcoal; aluminum

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SOV/76-32-9-36/46

Methods and Apparatus of Physical-Chemical Research. The Determination of the Specific Surface Areas of Porous Bodies and Powders by the Method of Gaseous Flow

silicate; untreated kaolin as well as kaolin which had been heated previously to 800°; porous quartz; burned chamotte; NB powder; tetranitro penterithrite; hexagene; and tri-nitrotoluene (TNT). There are 5 figures, 2 tables, and 4 references, 3 of which are Soviet.

ASSOCIATION: Akademiya nauk SSSR, Institut khimicheskoy fiziki, Moskva (AS USSR, Moscow Institute of Chemical Physics)

SUBMITTED: December 27, 1957

Card 2/2

5(4)

AUTHORS:

Korovina, G. V., Entelis, S. G., Chirkov, N. M.

SOV/20-121-6-24/45

TITLE:

The Velocity of the Absorption of Ethylene and Propylene by Sulfuric Acid of Various Concentrations (Skorost' pogloshcheniya etilena i propilena sernoy kislotoy raznykh kontsentratsiy)

PERIODICAL:

Doklady Akademii nauk SSSR, 1958, Vol 121, Nr 6, pp 1038-1040 (USSR)

ABSTRACT:

In the first part of this paper, the authors discuss some previous papers dealing with this subject. The real kinetics of the absorption of propylene and ethylene by sulfuric acid were investigated at 70° by means of a circulation apparatus which was described in one of the authors' previous papers (Ref 3). In the course of the experiment, gas pressure remained constantly equal to atmospheric pressure. The velocity of the absorption was measured by determining the decrease of the gas quantity in the gas burette. If only the initial kinetic curve of the absorption (with respect to the gross weight) is taken into consideration (in disregard of reversibility), the equation $d\Delta v/dt = k'P$ may be used for the

Card 1/3

SOV/20-121-6-24/45

The Velocity of the Absorption of Ethylene and Propylene by Sulfuric Acid of Various Concentrations

calculations. Δv denotes the variation of the volume of the gaseous phase reduced to standard conditions, and P - the pressure of the gas in the system. For k' , the equation $k' = 22,4 \cdot 10^3 k v_k$ is given. A table contains the data of the experiments concerning the absorption of propylene and ethylene by sulfuric acid of various concentrations. According to these results, there is a linear relation between the logarithm of the constant of the absorption velocity of the olefine and the function of the acidity of the medium: $\lg k = -1,1 H_0 - 7,77$ for ethylene and $\lg k = -0,97 H_0 - 3,24$ for propylene. In the process of alcohol formation and alkylation (which are the elements of the absorption of the olefines by the acid) the limiting stage is preceded by the same process of olefine protonization. The proportionality between the observed constant and the acidity shows that the particle of the sulfuric acid is not contained in the activated complex and that the formation of the alkyl acid belongs to the first order. Finally, an expression for the

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SOV/20-121-6-24/45

The Velocity of the Absorption of Ethylene and Propylene by Sulfuric Acid
of Various Concentrations

velocity of the alkylation reaction is given and explained.
There are 1 figure, 1 table, and 8 references, 5 of which
are Soviet.

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR
(Institute of Chemical Physics, AS USSR)

PRESENTED: April 24, 1958, by V. N. Kondrat'yev, Academician

SUBMITTED: April 22, 1958

Card 3/3

5(4)

AUTHORS:

Kazanskiy, K. S., Entelis, S. G., Chirkov, N. M. SOV/76-33-6-37/44

TITLE:

Solubility of Gaseous Isobutylene in Water (Rastvorimost' gazoobraznogo izobutilena v vode)

PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, No 6, pp 1409-1413 (USSR)

ABSTRACT:

The solubility of isobutylene (I) in water (0 .. 70°C) and aqueous NaCl-solutions (0 to - 5°C) at 1 atm pressure was investigated. The quantity of dissolved (I) was determined by the pressure drop in an accurately measured gas volume as in the experiments (Ref 2). The vessel (Fig 1), in which the measurements were made, had an oblong shape, and was placed, during the measurements, into a thermostat, where the intermixture was effected by shaking. The Henry constant was computed from the experimental results by an equation (3) (Table 1), and it was ascertained that the heat of solution ΔH_s rises with a reduction of temperature. The experimental results obtained - in contrast to other publication references on the water solubility of gases - cannot be described by

Card 1/3

SOV/76-33-6-37/44

Solubility of Caseous Isobutylene in Water

the classic equation according to Valentiner (Ref 6). In the temperature interval 70 - 25 °C, ΔH_s is constant and amounts to 4620 \pm 40 cal/mol; a further reduction of temperature leads to a rise of the heat of solubility (Fig 3). It is assumed that in the (I)-dissolution in water, two processes go on in parallel - one can be regarded as a physical disintegration, the other as a formation of an (I)-hydrate - so that the solubility as a function of temperature can be expressed by the sum of two exponential quantities (Equation (6)). The determination of the Henry constant for (I) in NaCl-H₂O mixtures at 0 °C (Table 2) and -5 °C (Table 3) shows that at -5 °C the equation according to Sechenov cannot be applied. There are 4 figures, 3 tables, and 10 references.

ASSOCIATION: Institut khimicheskoy fiziki
(Institute of Chemical Physics)

Card 2/3

S/076/60/034/007/040/042/XX
B004/B068

AUTHORS: ~~Entelis, S. G.,~~ Shlyapintokh, V. Ya., Karpukhin, O. N.,
and Nesterov, O. V.

TITLE: Chemiluminescence in Reactions of Acid Chlorides With
Amines and Ketones

PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol. 34, No. 7,
p. 1651

TEXT: It was established by the authors that the acylation of amines
and ketones by organic acid chlorides is accompanied by chemilumines-
cence. Luminescence can be observed with an ФЭУ-29 (FEU-29) photomulti-
plier sensitive to the range from 350 - 610 mμ. The following reactions
of the components dissolved in organic solvents are mentioned;

✓

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Chemiluminescence in Reactions of Acid Chlorides With Amines and Ketones S/O76/60/034/007/040/042/XX
B004/B068

| Reaction | Signal* |
|---------------------------------|---|
| $C_6H_5NH_2 + C_6H_5COCl$ | 0 (dissolved in chlorobenzene) |
| $C_6H_5NH_2 + C_6H_5COCl$ | 0.55 (dissolved in benzene) |
| $C_6H_5NH_2 + C_6H_5COCl$ | 2-5.5 (dissolved in acetone) |
| $C_6H_5NH_2 + ClOC(CH_2)_4COCl$ | 6.5 (amine in acetone, chloride in toluene) ✓ |
| $C_6H_5NH_2 + ClOC(CH_2)_4COCl$ | 7 (amine in benzene, chloride in toluene) |
| $CH_3COCH_3 + C_6H_5COCl$ | 0.35 (ketone in acetone, chloride in benzene) |
| $CH_3COCH_3 + ClOC(CH_2)_4COCl$ | 0.7 (ketone in acetone, chloride in toluene) |
| $C_6H_5NH_2 + HCl$ | 0.01 (dissolved in chlorobenzene) |

* The intensity of the signal is expressed in relative units. About $2 \cdot 10^4$ quanta/sec.cm³ of the reaction volume are taken as unit. There is 1 table.

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Chemiluminescence in Reactions of Acid Chlorides With Amines and Ketones S/076/60/034/007/040/042/XX
B004/B068

ASSOCIATION: Akademiya nauk SSSR, Institut khimicheskoy fiziki, Moskva
(Academy of Sciences USSR, Institute of Chemical Physics,
Moscow)

SUBMITTED: December 29, 1959

Card 3/3

S/020/60/132/05/49/069
B004/B011

AUTHORS: Entelis, S. G., Kazanskiy, K. S., Chirkov, N. M.

TITLE: Thermodynamics of Isobutylene Protonization

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 5,
pp. 1152-1155

TEXT: The authors wanted to make a direct determination of the equilibrium constants of olefin protonization, as well as of the heat and entropy of this reaction. They investigated the system isobutylene - sulfuric acid - water in which connection the conversion of iso-C₄H₈ in the liquid phase was measured spectrophotometrically at 210 mμ (Fig. 1). In order to obtain measurable reaction rates, it was necessary to work at -15 to -35°C. Fig. 2 shows the dependence of log D₂₁₀ on the reaction time τ (D₂₁₀ = optical density at 210 mμ). Fig. 3 illustrates the dependence of the molar extinction coefficient ε on temperature. The basicity constant pK

✓B

Card 1/3

Thermodynamics of Isobutylene Protonization

S/020/60/132/05/49/069
B004/B011

was calculated (Table 1) whose dependence on $1/T$ is shown in Fig. 4. The heat $\Delta H_R = 4.3 \pm 4$ kcal/mole was found for the protonization of $\text{iso-C}_4\text{H}_8$, and $\Delta S = +8.20$ e.u. for the entropy. Moreover, the value for $\Delta H_s(\text{tert-C}_4\text{H}_9^+)$ equal to (-64 ± 4) kcal/mole was calculated from equation

$$(8) \Delta H_s(\text{tert-C}_4\text{H}_9^+) + \Delta H_s(\text{H}_2\text{O}) - \Delta H_s(\text{iso-C}_4\text{H}_8) - \Delta H_s(\text{H}_3\text{O}^+) = 33 \text{ kcal.}$$

The authors discuss the paper by V. N. Kondrat'yev and N. D. Sokolov (Ref. 7). They assume two types of interaction of the carbonium ion with water: solvation, or donor-acceptor interaction under the formation of an alkoxonium ion, which two interactions are separated by a potential barrier. The authors refer to a paper by A. I. Gel'bshteyn, G. G. Shcheglova, and M. I. Temkin (Ref. 3). There are 4 figures, 1 table, and 8 references: 4 Soviet, 3 British, and 1 American.

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics of the Academy of Sciences, USSR)

✓B

Card 2/3

ENTELIS, S.G.; SHLYAPINTOKH, V.Ya.; KARPUKHIN, O.N.; NESTEROV, O.V.

Chemiluminescence in the reaction involving the formation of
nylon when the process is carried out in solution and at the
phase boundary. Vysokom. soed. 2 no. 3:463 Mr '60.

(MIRA 13:11)

(Nylon) (Luminescence)

ENTELIS, S.G.; KOROVIK, G.V.; CHIRKOV, N.M.

Thermodynamics of the absorption of propylene by the system

$H_2SO_4 - H_2O$. Dokl. AN SSSR 134 no.4:856-859 0 '60.

(MIRA 13:9)

1. Institut khimicheskoy fiziki Akademii nauk SSSR. Predstavleno
akad. V.N.Kondrat'yevym.

(Propene)

(Sulfuric acid)

ENTELIS, S.G.; KOROVINA, G.V.; CHIRKOV, N.M.

Acidity function of solutions of propylene in aqueous sulfuric acid. Izv. AN SSSR. Otd. khim. nauk no.11:2050-2052 N '60.
(MIRA 13:11)

1. Institut khimicheskoy fiziki AN SSSR.
(Propene) (Sulfuric acid)

ENTELIS, S.G.; KOROVINA, G.V.; CHIRKOV, N.M.

Thermodynamic activity of water in the system $H_2O - H_2SO_4 - i-C_3H_7OH$
Izv. AN SSSR. Otd. khim. nauk no. 12:2252-2254 D 160.
(MIRA 13:12)

1. Institut khimicheskoy fiziki AN SSSR.
(Activity theory) (Sulfuric acid) (Isopropyl alcohol)

ENTELIS, S.G.; KONDRAT'YEVA, G.P.; CHIRKOV, N.M.

Kinetics and mechanism of the initial stage of polycondensation
of terephthaloyl chloride with ethylene glycol. Part 2: Tempera-
ture dependence of the reaction rate. Vysokom.
soed. 3 no.8:1170-1175 Ag '61. (MIRA 14:9)

1. Institut khimicheskoy fiziki AN SSSR.
(Terephthaloyl chloride) (Ethylene glycol)

ENTELIS, S.G.; KONDRAT'YEVA, G.P.; CHIRKOV, N.M.

Kinetics and mechanism of the initial stage of the polycondensation of terephthaloyl chloride with ethylene glycol. Part 1: Relation between the reaction rate and the polarity of the medium. Vysokom. soed. 3 no.1044-1053 J1 '61. (MIRA 14:6)

1. Institut khimicheskoy fiziki AN SSSR.
(Terephthaloyl chloride) (Ethylene glycol) (Polymerization)

ENTELIS, S.G.; EPPLE, G.V.; CMIRKOV, N.M.

Kinetics of the reduction of triphenylcarbinol by isopropyl alcohol in an aqueous sulfuric acid medium by hydride transfer.
Dokl. AN SSSR 136 no. 3:667-670 Ja '61. (MIRA 14:2)

1. Institut khimicheskoy fiziki AN SSSR. Predstavleno akademikom
V.N. Kondrat'yevym.
(Reduction, Chemical) (Methanol) (Isopropyl alcohol)

ENTELIS, S.G.; TIGER, R.P.; EPPLER, G.V.; CHIRKOV, N.M.

Kinetics of the reduction of diphenyl-*m*-tolylcarbinol by isopropyl alcohol by hydride transfer in the system $H_2SO_4 - H_2O$. Dokl. AN SSSR 137 no.6:1420-1423 Ap '61. (MIRA 14:4)

1. Institut khimicheskoy fiziki AN SSSR. Predstavleno akademikom V.N.Kondrat'yevym.
(Methanol) (Isopropyl alcohol)

ENTELIS, S.G.; ENTELIS, S.G.

Application of Harcott-Litt's equation to the reaction of
hydride transition in an acid medium. Dokl. AN SSSR 141
no.1:121-124, 1961. (RU. 14:11)

1. Institut Khimicheskoy Fiziki AN SSSR. Predstavleno akademikom
V.M. Morozovskiy.

(Methanol)

(Hydrides)

(Chemical reaction, Rate of)

EPPLE, G.V.; ODINTSOVA, V.P.; ENTELIS, S.G.

Kinetics and mechanism of dianisilphenylcarbinol reduction
with isopropyl alcohol in a medium of $H_2SO_4 - H_2O$ and $HCl - H_2O$.
Kin.i kat. 2 no.6:821-826 N-D '61. (MIRA 14:12)

1. Institut khimicheskoy fiziki AN SSSR.
(Methanol)
(Isopropyl alcohol)

IVANOV, V.V.; ENTELIS, S.G.

Nuclear magnetic resonance study of association in the systems
ethyl alcohol - water and isopropyl alcohol - water. Izv. AN SSSR
Otd.khim.nauk no.1:178-180 Ja '62. (MIRA 15:1)

1. Institut khimicheskoy fiziki AN SSSR.
(Alcohols) (Systems (Chemistry)--Spectra)

KAZANSKIY, K.S.; ENTELIS, S.G.

Kinetics and mechanism of dimerization of 1,1-diphenylethylene in the H_2SO_4 - H_2O system. Part 1: Ionization of 1,1-diphenylethylene in aqueous sulfuric acid. Kin.i kat. 3 no.1:36-41 '62.

(MIRA 15:3)

1. Institut khimicheskoy fiziki AN SSSR.
(Ethylene) (Ionization)

S/190/62/004/007/001/009
B145/B/180

AUTHORS: Entelis, S. G., Nesterov, O. V., Bondareva, G. G.
TITLE: Interfacial polycondensation of phthalyl chloride and piperazine
PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 7, 1962, 995 - 999

TEXT: Molecular weight and polycondensate yield were studied in dependence on reaction conditions. Owing to the high rate condensation the rate of monomer diffusion and hence the degree of dispersion of the phases play an important part. It is suggested that the molecular weight and yield increase as the reaction approaches the kinetic region. At room temperature and with vigorous stirring a solution of phthalyl chloride in an organic solvent was added to an aqueous solution of piperazine or an emulsion of aqueous solution of piperazine and organic solvent. The volume ratio of the phases was constant at 1 : 1. Table 1 and Figs. 2 and 3 show the dependencies of Mw and yield on various conditions. Molecular weight was higher with more rapid addition (55000 at t = 10 min)

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S/190/62/004/007/001/009
B145/B180

Interfacial polycondensation of ...

to 87000 at $t = 10$ sec). Excess piperazine due to slow addition increases the probability of the chain breaking. Addition of emulsifiers increases yield and M_w (from 75.8 to 88.0% and from $5.5 \cdot 10^4$ to $9.7 \cdot 10^4$ with OW-7 (OP-7)). Chlorinated hydrocarbons as solvents (reaction product partly soluble) produced higher M_w with benzene and toluene (insoluble reaction product): CCl_4 : $M_w = 7.0 \cdot 10^4$, benzene : $M_w = 1.85 \cdot 10^4$. Yield and

M_w also rise with addition of bases, the latter due to fewer chain ruptures with HCl binding and the former probably owing to catalysis of polycondensation. I. M. Bel'govskiy is thanked for assisting in the molecular weights measurements done by the scattered light method. There are 3 figures and 4 tables. The most important English-language references are : E. J. Cairns, J. M. Prausnitz, J. Chem. Phys., 32, 169, 1960; M. Katz, J. Polymer Sci., 40, 337, 1959.

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR (Institute of Chemical Physics AS USSR)

SUBMITTED: April 13, 1961

Card 2/2

EPPLÉ, G.V.; ODINTSOVA, V.P.; ENTELIS, S.G.

Measurement of the secondary Debye acidity function (C) of the
HCl - H₂O system. Izv.AN SSSR.Otd.khim.nauk no.8:1365-1367 Ag '62.
(MIRA 15:8)

1. Institut khimicheskoy fiziki AN SSSR.
(Hydrogen-ion concentration) (Hydrochloric acid)

S/062/63/000/002/005/020
B144/B186

AUTHORS: Entelis, S. G., Tiger, R. P., Nevel'skiy, E. Ya., and
Epel'baum, I. V.

TITLE: Kinetics and mechanism of the hydrolysis of carboxylic
anhydrides. Communication 1. Dependence of the reaction
rate on the polarity of the medium

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh
nauk, no. 2, 1963, 245 - 252

TEXT: The hydrolysis of phthalic (I) and terephthalic (II) ohloro anhydride
was studied spectrophotometrically at 35°C in dioxane containing 0.1 -
15.7 M/l of water. The concentration of the ohloro anhydride was varied
from $0.5 \cdot 10^{-5}$ to $1 \cdot 10^{-4}$ M/l. Owing excess H_2O , the reaction seems to be zero
order: $w = -dc_x/dt = k_1 c_x$ (2), where k_1 is the velocity constant observed
and c_x is the ohloro anhydride concentration during the reaction. The
first order of the reaction with respect to the ohloro anhydride was
established from the independence of k_1 from the initial concentration. If
Card 1/3

Kinetics and mechanism of the...

S/062/63/000/002/005/020
B144/B186

the reaction is also first order with respect to H_2O , eq. 2 becomes
 $w = -dc_X/dt = k_2 c_X c_{H_2O}$ and $k_1 = k_2 c_{H_2O}$. In II, k_2 proved almost independent
of the H_2O concentration up to 0.8 M/l and then increased with increasing
 c_{H_2O} . From the two possible explanations, i.e., second-order reaction with
respect to water and H_2O effect on the dielectric constant, the first could
be ruled out by plotting the curve for the rate of hydrolysis as a function
of c_{H_2O} in dioxane. To verify the second possibility, the rate of hydro-
lysis was studied, keeping c_{H_2O} constant and varying the dielectric constant
 ϵ by adding acetonitrile: k_2 increased with increasing ϵ . When ϵ was
kept constant, k_2 also remained constant, although c_{H_2O} increased by a
factor of 3. These results for II prove that the dependence of k_2 on the
 H_2O content is only due to the c_{H_2O} effect on ϵ and that the reaction is
Card 2/3

Kinetics and mechanism of the...

8/062/63/000/002/005/020
B144/B186

second-order (first-order with respect to each reagent). With I, k_2 increased only in water-dioxane medium; in the ternary system, k_2 decreased with constant c_{H_2O} and increasing ϵ and rose slightly with constant ϵ and increasing c_{H_2O} . For II $\log k_2 = -4.33 + 2.19(\epsilon - 1)/(2\epsilon + 1)$, and for I $\log k_2 = -3.75 + 0.91(\epsilon - 1)/(2\epsilon + 1)$. The dipole moments calculated from these data and the Kirkwood equation were $6.95 \cdot 10^{-18}$ CGSE units for II, and $6.85 \cdot 10^{-18}$ CGSE units for I. There are 5 figures and 4 tables.

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics of the Academy of Sciences USSR)

SUBMITTED: November 15, 1962

Card 3/3

KAZANSKIY, K.S.; KOGAN, G.A.; ENTELIS, S.G.

Kinetics of styrene dimerization in aqueous sulfuric acid. Part.
2: Kinetic regularities and the mechanism of styrene dimerization.
Kin. i kat. 4 no.4:589-594 JI-Ag '63. (MIFA 16:11)

1. Institut khimicheskoy fiziki AN SSSR.

ENTELIS, S.G.; KAZANSKIY, K.S.

Kinetics and the mechanism of 1,1-diphenylethylene dimerization
in aqueous sulfuric acid. Part 2: Kinetic regularities and
the reaction mechanism. Kin.i kat. 4 no.5:713-722 S-O '63.
(MIRA 16:12)

1. Institut khimicheskoy fiziki AN SSSR.

ENTELIS, S.G.; NESTEROV, O.V.

Kinetics of the interaction between acid chlorides and amines.
Dokl. AN SSSR 148 no.6:1323-1326 F '63. (MIRA 16:3)

1. Institut khimicheskoy fiziki AN SSSR. Predstavleno akademikom
V.N.Kondrat'yevym.

(Amines) (Chlorides)

KAZANSKIY, K.S.; YEVREINOV, V.V.; ENTELIS, S.G.

Kinetics of heterogeneous catalytic polymerization of ethylene
oxide on strontium carbonate. Izv. AN SSSR. Ser. khim. no. 2: 274-
281 F '64. (MIRA 17:3)

1. Institut khimicheskoy fiziki AN SSSR.

KAZANSKIY, K. S.; KOROVINA, G. V.; VAYNSHTOK, B. I.; ENTELIS, S. G.

Polymerization of ethylene oxide on strontium carbonate and the effect of water adsorption on catalytic activity. Izv AN SSSR Ser Khim no. 4:759-761 Ap '64. (MIRA 7:5)

1. Institut khimicheskoy fiziki AN SSSR.

KAZANSKIY, K.S.; BANTSYREV, G.I.; ENTELIS, S.G.

Structure and properties of propylene oxide polymerization catalysts
formed in the hydrolysis of the complex FeCl_3 - monomer. Dokl.
AN SSSR 155 no.1:132-135 Mr '64. (MIRA 17:4)

1. Institut khimicheskoy fiziki AN SSSR. Predstavleno akademikom
V.N.Kondrat'yevym.

KAZANSKIY, K.S.; ENTELIS, S.G.

Thermochemistry of α -oxide polymerization. Izv. AN SSSR. Ser.
khim. no.6:1089-1091 '65. (MIRA 18:6)

1. Institut khimicheskoy fiziki AN SSSR.

"APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041212

TOPIC TAGS: crystal chemistry, fluorescence

APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R00041212(

DO NOT SAY: 002

OTHER: 002

JPIS

TIGER, R.P.; NEVEL'SKIY, E. Ya.; EPEL'BAUM, I.V.; ENTELIS, S.G.

Kinetics and mechanism of hydrolysis of diacyl dichlorides.
Report No.3: Hydrolysis of acyl chlorides in the presence of
acids and alkali. Izv. AN SSSR Ser. khim. no.11:1969-1974 N '64
(MIRA 18:1)

1. Institut khimicheskoy fiziki AN SSSR.

NESTEROV, O.V.; ENTELIS, S.G.

Kinetics of interaction between p-chlorophenyl isocyanate and
methyl alcohol in n-heptane. Kin. i kat. 6 no.1:178-179 Ja-F
'65. (MIRA 18:6)

1. Institut khimicheskoy fiziki AN SSSR.

ENTELIS, S.G.; BEKHILI, Ye.Yu.; NESTEROV, O.V.

Multiple stages in ultrafast reactions of amines with acid chlorides. Kin. i kat. 6 no.2:331-332 Mr-Apr '65. (MIRA 18:7)

1. Institut khimicheskoy fiziki AN SSSR.

YEVRELOV, V.V.; ENTELIS, S.G.

Use of the thermometric method for studying the kinetics of
liquid-phase reactions. Kin. i kat. 6 no.5:922-927 S.-7 '65.
(MIRA 18:11)

1. Institut khimicheskoy fiziki AN SSSR.

ENTELIS, V. A.

"One-Piece T-Shaped Tube of Elastic Acrylic Plastic," Vest. Oto-rino-
laringol., No. 2, 1948.

Otorhinolaryngol. Clinic, Ivanovo State Med. Inst.

ENTELIS, V.A.

"Clinical dental prosthesis." A.M.Guzikov. Reviewed by V.A.Entelis.
Stomatologiya no.1:62-63 Ja-F '54. (MLRA 7:1)
(Teeth, Artificial) (Guzikov, A.M.)

ENTENZON, M.M., inzh. (g.Kishinev)

Efficient methods of firing locomotives with fuel oil. Zhel.
dor.transp. 43 no.6:68-69 Je '61. (MIRA 14:7)
(Locomotives) (Petroleum as fuel)

ENTENZON, M.M.

Soiling of the fuel filters of TEM1 diesel locomotives. Elek. i tepl.
tiaga no.7:8 JI '63. (MIRA 16:9)

1. Nachal'nik dorozhnoy khimiko-tekhnicheskoy laboratorii Moldavskoy
dorogi.

(Diesel engines—Fuel systems)

ENTIN, A. I.

USSR/Pharmacology. Pharmacognosy. Toxicology -
Hormone Preparations.

T-7

Abs Jour : Referat Zhur - Biologiya, No 16, 1957, 7181⁴

Author : Entin, A.I., Rafes, Yu.I.

Inst :

Title : The Effectiveness of ACTH in Several Internal Diseases.

Orig Pub : Vracheb. Delo, 1956, No 12, 1313-131⁴

Abstract : 28 patients received ACTH in 10 unit doses 2-6 times daily; a total of 220-1180 units. Positive results were obtained in treatment of patients with erythema nodosum, and chronic infectious polyarthrits; considerable improvement- in patients with bronchial asthma. In treatment of rheumatism the ACTH was not always effective. Side reactions were observed- cardiac pains, palpitations, peeling of skin; they disappeared when the administration of ACTH was discontinued.

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- 71 -

ENTIN, A.I., dotsent; RAFES, Yu.I.

ACTH therapy in a case of severe drug hypersensitivity. Sov.med.
20 no.5:84-85 My '56. (MIRA 9:9)

1. Iz kafedry fakul'tetskoy terapii (zav. - dotsent E.V.Khait)
sanitarno-gigiyenicheskogo fakul'teta Dnepropetrovskogo meditsin-
skogo instituta (dir. - dotsent D.P.Chukhriyenko)

(SULFANILAMIDE, injurious effects,
allergic reaction, ACTH ther. (Rus))

(ACTH, therapeutic use,
sulfanilamide allergy (Rus))

(ALLERGY, etiology and pathogenesis,
to sulfanilamide, ACTH ther. (Rus))

Entin, A I

~~ENTIN, A. I.~~ dots.

Blood protein deficiency in kidney diseases. Vrach.delo supplement
'57:7-8 (MIRA 11:3)

1. Kafedra fakul'tetskoy terapii (sav.-prof. B.A.Zalkind)
Dnepropetrovskogo meditsinskogo instituta.
(KIDNEYS--DISEASES) (BLOOD PROTEINS)

ENTIN, A.I., dotsent; STRONOVSKAYA, Yu.S.

Treatment of peptic ulcer with bikalin. Vrach. delo no.2:138
F. '61. (MIRA 14:3)

1. Kafedra fakul'tetskoy terapii II (sav. - dotsent A.I.Entin)
Dnepropetrovskogo meditsinskogo instituta.
(PEPTIC ULCER) (BISMUTH--THERAPEUTIC USE)

NADZHMITDINOV, N.A.; ENTIN, B.B.

Some problems in planning and organizing rural public health service
in Andizhan Province. Med. zhur. Uzb. no.6:54-58 Je '60.
(MIRA 15:2)

1. Iz Andizhanskogo oblastnogo zdavotdela.
(ANDIZHAN PROVINCE PUBLIC HEALTH, RURAL)

ENTIN, B.S.

Kidney function tests in peptic ulcer of the stomach and duodenum.
Zdrav. Bel. 9 no.3:25-26 Mr'63 (MIRA 16:12)

1. Iz fakul'tetskoy terapevticheskoy kliniki Minskogo meditsinskogo instituta i terapevticheskogo otdeleniya 2-go klinicheskogo ob"yedineniya Minska.

ENTIN, D.Z. (Leningrad)

Improvement of the design of electric power supply systems of
industrial enterprises. Prom. energ. 18 no.11:59 N '63.
(MIRA 16:12)

ENTIN, G. M.

"Activity of Valerian Preparations Manufactured for Use with Alcohol at
40° and 70°," Med. prom., No.1, 1949

ENTIN, G.M., gvardii mayor meditsinskoy sluzhby

Experimental psychological rating of the flying capacities of
cadets. Voen.-med.shur. no.7:75-76 J1 '59. (MIRA 12:11)
(AVIATION MEDICINE)

ENTIN, G.M.; GROMOVA, V.V.

Therapeutic effect of the ganglion-blocking drug, dicoline, in the treatment of cerebrovascular diseases. Trudy Gos. nauchno-issl. inst. psikh. 22:408-419 '60. (MIRA 15:1)

1. Klinika sosudistyykh psikhozov (zav. prof. V.M.Banshchikov)
Gosudarstvennogo nauchno-issledovatel'skogo instituta psikhiatrii
Ministerstva zdravookhraneniya RSFSR.
(DICOLINE) (CEREBROVASCULAR DISEASE)

FEDOTOV, D.D., prof., otv. red.; ROKHLIN, L.L., prof., zam. otvet. red.;
TARASOV, G.K., dots., red.; AVRUTSKIY, G.Ya., red.; BORINEVICH,
V.V., red.; ZAK, N.N., red.; ZELEVA, M.S., red.; RAVKIN, I.G., red.;
REMEZOVA, Ye.S., red.; TSUTSUL'KOVSKAYA, M.Ya., red.; ENTIN, G.M.,
red.; BORINEVICH, V.V., otv. za vypusk

[Modern methods of treating mental illness; methodological
materials for aiding the practicing physician]Sovremennye metody le-
cheniya psikhicheskikh zabolevani; metodicheskie materialy v po-
moshch' prakticheskomu vrachu. Pod red. L.L.Rokhlina i G.K.Taraso-
va. Moskva, 1961. 67 p. (MIRA 15:1)

1. Moscow. Gosudarstvennyy nauchno-issledovatel'skiy institut psikhi-
atrii.

(MENTAL ILLNESS) (PSYCHOPHARMACOLOGY)

BANSHCHIKOV, V.M., prof.; KOSENKO, Z.V., doktor med.nauk; ENTIN, G.M.

Vascular diseases and the role of alcohol in them. Sov.med. 25 no.6:
34-40 Je '61. (MIRA 15:1)

1. Iz gosudarstvennogo nauchno-issledovatel'skogo instituta psikiatrii
Ministerstva zdavookhraneniya RSFSR (dir. - prof. V.M.Banshchikov).
(ALCOHOLISM) (CARDIOVASCULAR SYSTEM DISEASES)